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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/037,942	01/03/2002	Alain M. Sagnard	61301A	7761

109 7590 04/13/2004

THE DOW CHEMICAL COMPANY  
INTELLECTUAL PROPERTY SECTION  
P. O. BOX 1967  
MIDLAND, MI 48641-1967

EXAMINER

RHEE, JANE J

ART UNIT	PAPER NUMBER
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1772

13

DATE MAILED: 04/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application N .

10/037,942

Applicant(s)

SAGNARD ET AL.

Examin r

Jane J Rhee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 15-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12, 15-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/14/03 has been entered.

### ***Withdrawn Rejections***

2. The 35 U.S.C. 103 rejection over Reeves et al. in view of Ducharme of claims 1-12,21,22 are withdrawn due to applicant's amendment in Paper 12.
3. The 35 U.S.C. 103 rejection over Reeves et al. and Ducharme in view of Malone of claims 15-20 are withdrawn due to applicant's amendment in Paper 12.

The following are new grounds of rejection for the newly presented claims 1-12,15-20 in amendment filed on 11/14/04.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-12,15,21,22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grinshpun et al. (6226943).

Grinshpun et al. discloses a building panel comprising at least two panel domains (figure 6 numbers 63,60), wherein each panel domain has an essentially homogeneous strength and an average compressive strengths (col. 4 lines 65- col. 5 lines 1-8) wherein the panel has at least two panel domains having different average compressive strengths (col. 4 lines 65- col. 5 lines 1-8) and is essentially free of a combination of hollow and solid foam strands (figure 6). Grinshpun et al. discloses that the panel has a uniform panel thickness (figure 6). Grinshpun et al. discloses that the panel has an edge containing a panel domain extending from a primary face to an opposing face (figure 6 number 60). Grinshpun et al. discloses at least one panel domain that is a conformable panel domain that allows the panel to reversibly bend from a planar to a nonplanar configuration (col. 4 line 67, foam is resilient therefore can bend).

Grinshpun et al. discloses that each panel domain comprises a polymeric foam (col. 5 lines 42). Grinshpun et al. discloses that the panel has alternating conformable and rigid panel domains (figure 6 number 63,60). Grinshpun discloses that the panel has a perimeter and the perimeter comprises at least one conformable panel domain (figure 6 number 61). Grinshpun et al. discloses a conformable panel along at least one edge (figure 6 number 61). Grinshpun et al. discloses that the panel domains are bands (figure 6 numbers 63,60). Grinshpun et al. discloses that at least one edge of the panel is a conformable domain (figure 6 numbers 61). Grinshpun et al. discloses that the panel domains extend through the thickness of the panel (figure 6 number 60).

Grinshpun et al. discloses that at least one panel domain is a conformable panel domain that, when compressed reduces at least one dimension of the panel thereby

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allowing insertion of the panel into a cavity, wherein the panel also has a compressive recovery that causes frictional retention of the panel within the cavity (col. 5 lines 2-5). Grinshpun et al. discloses that the panel has at least one edge that comprises a tongue or groove profile (figure 6 number 67). Grinshpun et al. discloses that the panel has a slit penetrating to a depth less than the panel thickness traverses the primary faces or the face opposing the primary face (figure 6 number 68 or 69). Grinshpun et al. discloses that the two domains differ in average compressive strength by at least 5% (col. 5 lines 56-60 and col. 7 lines 4-7). Grinshpun et al. discloses that at least one panel domain has an open cell content of 5 percent or 50 percent or more according to American Society for Testing and Materials method D2856A (col. 5 lines 42-48).

Grinshpun et al. fail to disclose a cavity defined by cavity walls that has a compressive recovery that supplies sufficient pressure against the cavity walls to frictionally retain the building panel within the cavity, the pressure being 100 Newtons per square meter or more and 200,000 Newton per square meter or less.

Grinshpun et al. teaches that an applied load of 15psi will compress and deform a 4 inch thick section of foam by at least 10 percent, but such a deformation is at least 80 percent reversible when the load is removed (col. 5 lines 26-30), furthermore teaches that the compressible foam is an open cell foam wherein the optimum number of open cells for a foam sheet will depend on the degree of compressibility need to allow the foam to fit between the support members and to be compressed to a certain size or shape for storage and shipment prior to use (col. 5 lines 49-52), therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was

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made to provide Grinshpun et al. with a compressive recovery that supplies sufficient pressure against the cavity walls to frictionally retain the building panel within the cavity, the pressure being 100 Newtons per square meter or more and 200,000 Newton per square meter or less in absence of unexpected results.

5. Claims 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grinshpun et al. in view of Malone (4824720).

Grinshpun et al. discloses the panel described above. Grinshpun et al. discloses that at least one panel domain has an open cell content of 5 percent or 50 percent or more according to American Society for Testing and Materials method D2856A (col. 5 lines 42-48) and having a density of at least 0.3 pounds per cubic foot (col. 5 line 57). Grinshpun et al. fail to disclose that at least one panel domain comprises coalesced polymeric foam strands and wherein the foam strands comprise polypropylene. Grinshpun et al. fail to disclose that at least one panel domain comprises coalesced polymeric foam strands having interstrand spaces. Grinshpun et al. fail to disclose foam's average cell diameter within the range of 0.01 to 10mm.

Malone teaches coalesced polymeric foam strands that comprise polypropylene (col. 1 lines 14-15, 30) and have interstrand spaces (col. 5 lines 20-22, 33-35) for the purpose of providing cushion properties (col. 1 lines 31-32). Malone teaches the open cell content of 15 percent with diameter of 1mm (col. 6 line 42-45) for the purpose of to allow the achievement of improved cushioning of objects particularly at low stat loadings (col. 5 lines 59-61).

Therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide Grinshpun et al. with coalesced polymeric foam strands that comprise polypropylene and have interstrand spaces in order to provide cushion properties (col. 1 lines 31-32) as taught by Malone.

Furthermore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide Grinshpun et al. with the open cell content of 15 percent with a diameter of 1mm in order to allow the achievement of improved cushioning of objects particularly at low stat loadings (col. 5 lines 59-61) as taught by Malone.

### ***Response to Arguments***

6. Applicant's arguments with respect to claims 1-12,15-22 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jane J Rhee whose telephone number is 571-272-1499. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nasser Ahmad can be reached on 571-272-1487. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and none for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



Jane Rhee  
April 5, 2004



NASSER AHMAD  
PRIMARY EXAMINER